AN EDUCATIONAL SERVICE OF THE
COLORADO RIVER WATER CONSERVATION DISTRICT

Endangered Species

The presence of endangered species has become a complicating factor in how humans use water. In part because of human activities that disrupt natural ecosystems, various species of plants and animals are failing to thrive and are threatened with extinction. In response, President Richard M. Nixon signed the Endangered Species Act into law in 1973 to protect against the permanent loss of threatened or endangered species because our rich natural heritage is of "esthetic, ecological, educational, recreational, and scientific value to our Nation and its people."

The Endangered Species Act seeks to protect species listed as threatened or endangered by formulating plans to recover populations to self-sustaining numbers through preservation of habitat essential for the survival of the species and by ensuring that human activities do not cause any further threat.

The ecological role endangered species play in their ecosystem may seem insignificant from the outside, but each species performs a specific function in its environment. Taking a species out of an ecosystem's food chain or removing the function of a given species can lead to an imbalance that can have negative consequences for humans. Pests can become more abundant, diseases previously held in check may spread and a part of the food chain can collapse with negative consequences to other important animal and plant species. Of increasing importance is the potential loss of vital genetic material that could have important benefits for mankind in the future.

Some 1,260 plant and animal species are listed as threatened or endangered in the United States, and 31 of these species are in Colorado. Of these 31 species, four in particular have an effect on the use of water in the Colorado River Basin: the humpback chub, the Colorado pikeminnow, the bonytail chub and the razorback sucker. These fish specifically adapted to flow conditions in the Colorado River that ranged from roaring floods to parching droughts, making them like no other species in the world.

A program to recover populations of these four fish back to self-sustaining levels was established in 1988, creating a partnership of many diverse agencies, groups and interests. Recovering the fish involves hatchery-raising stocks of fish for reintroduction in to the wild, protecting critical habitat areas, managing river flows to mimic conditions beneficial to survival and reproduction, controlling numbers of competing and predatory non-native species and taking efforts to reduce the impacts of water diversion structures on fish migration.

Implementation of the Endangered Species Act has caused conflict between human use of natural resources and endangered species protection activities. Managing river flows to benefit endangered fish habitat can impact human use of water. Controlling non-native fish such as pike and bass can anger sport fisherman. Recovering endangered species comes with a price tag that some consider excessive.

The Colorado River Recovery Program for the Endangered Fishes is considered a model for other species' recovery efforts. Cooperative measures such as enlarging Elkhead Reservoir to provide water for fish and human uses shows that win-win situations are possible with endangered species recovery. More information on this program is available at www.r6.fws.gov/crrip.